Remaining Competitive in a Global Economy: An Outsider's Perspective on the Higher Education Issues Facing California

Presented to the

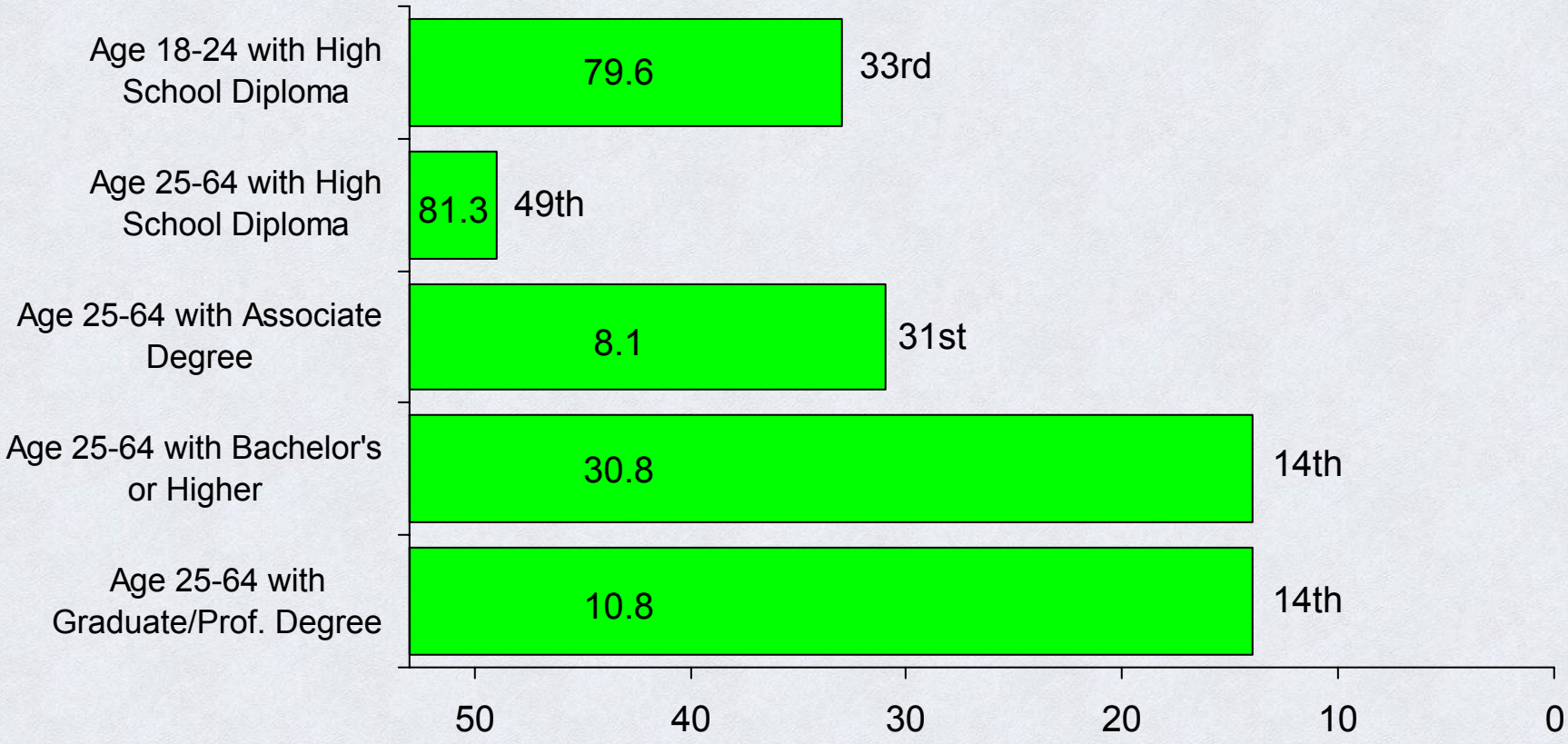
California Postsecondary Education Commission

Sacramento, California

December 13, 2006

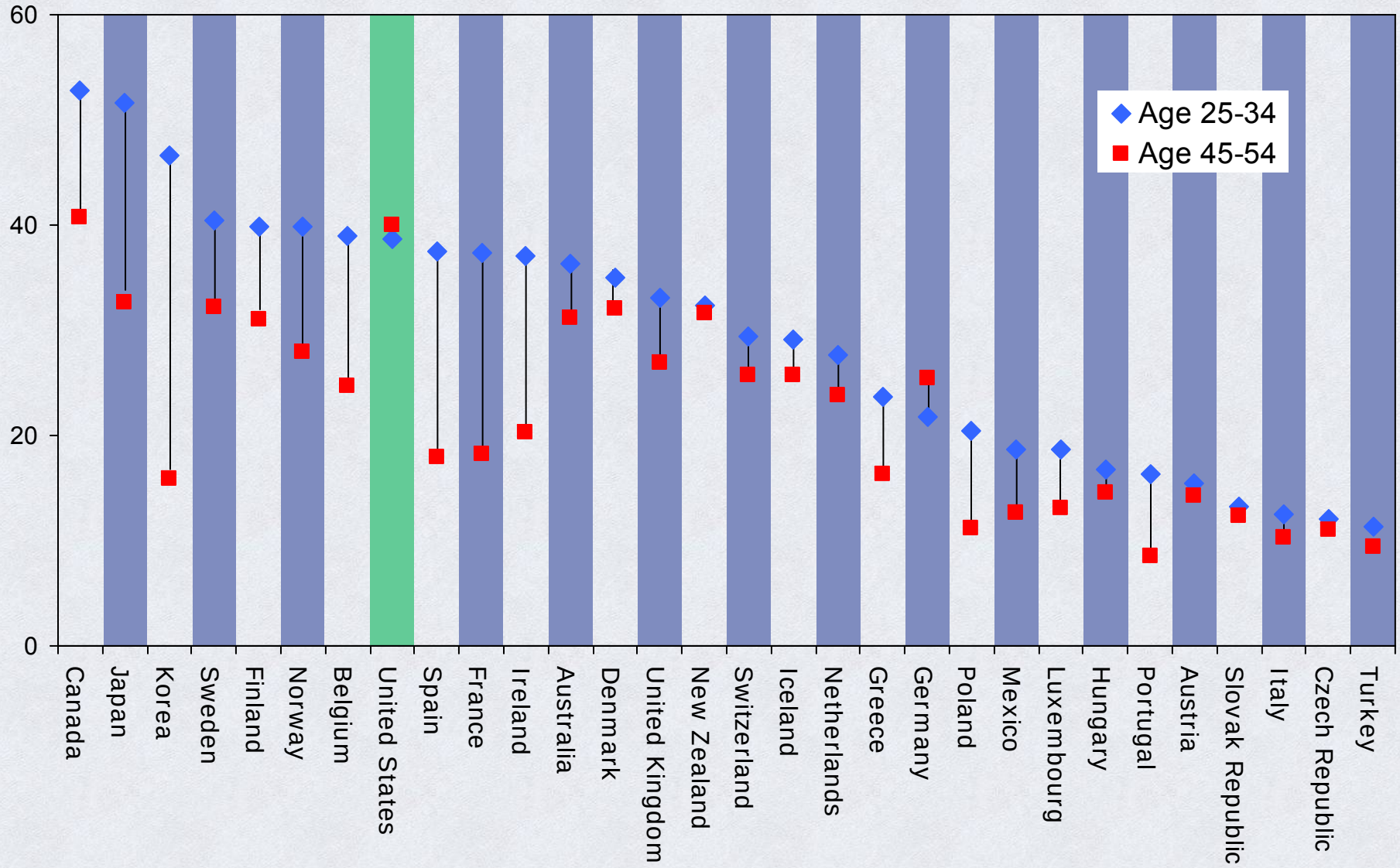
NCHEMS
National Center for Higher Education Management Systems – Boulder, CO

Educational Attainment and Rank Among States—California, 2005 (Percent)



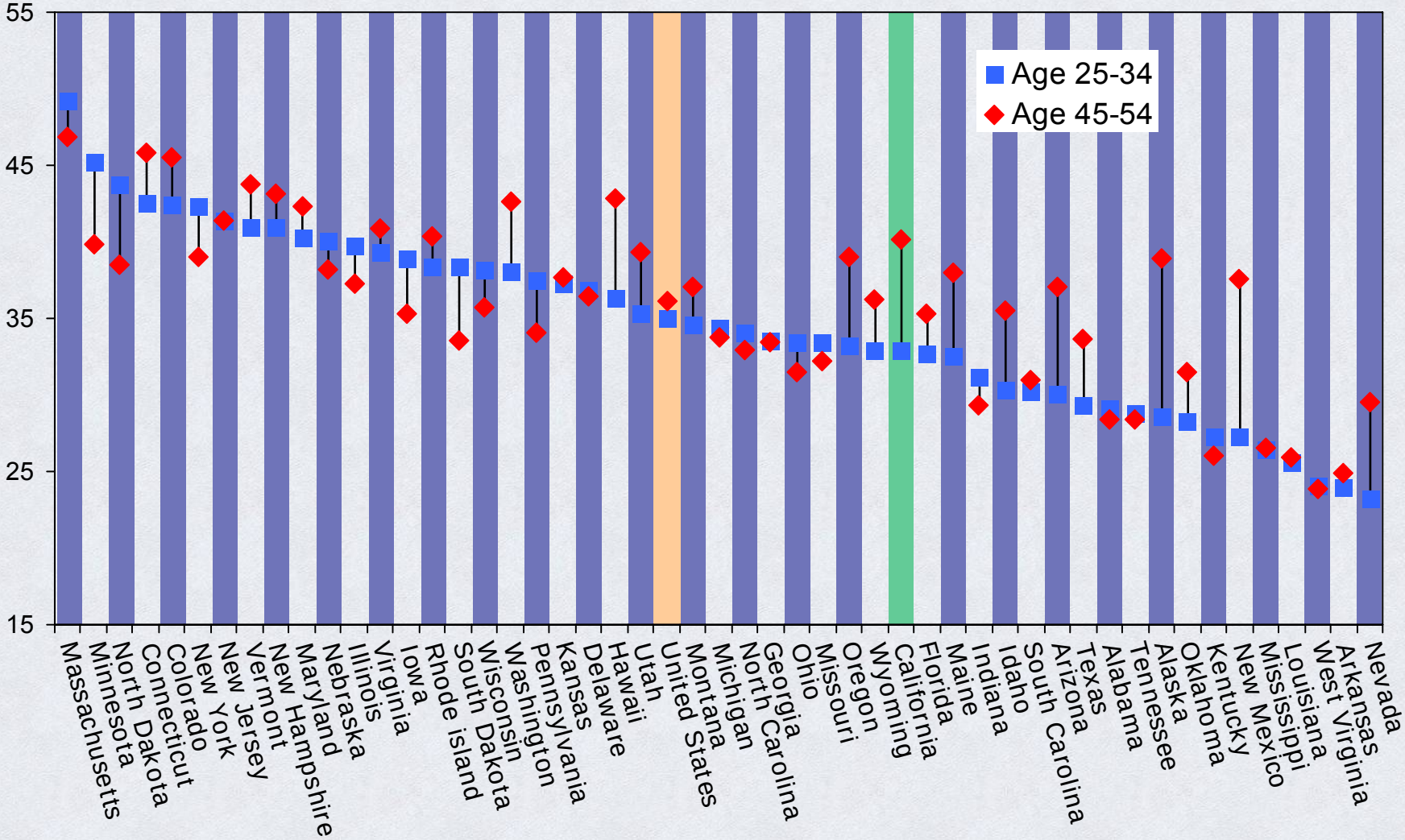
Source: U.S. Census Bureau, 2005 American Community Survey (ACS)

Differences in College Attainment (Associate and Higher) Between Young and Older Adults—U.S. and OECD Countries, 2004



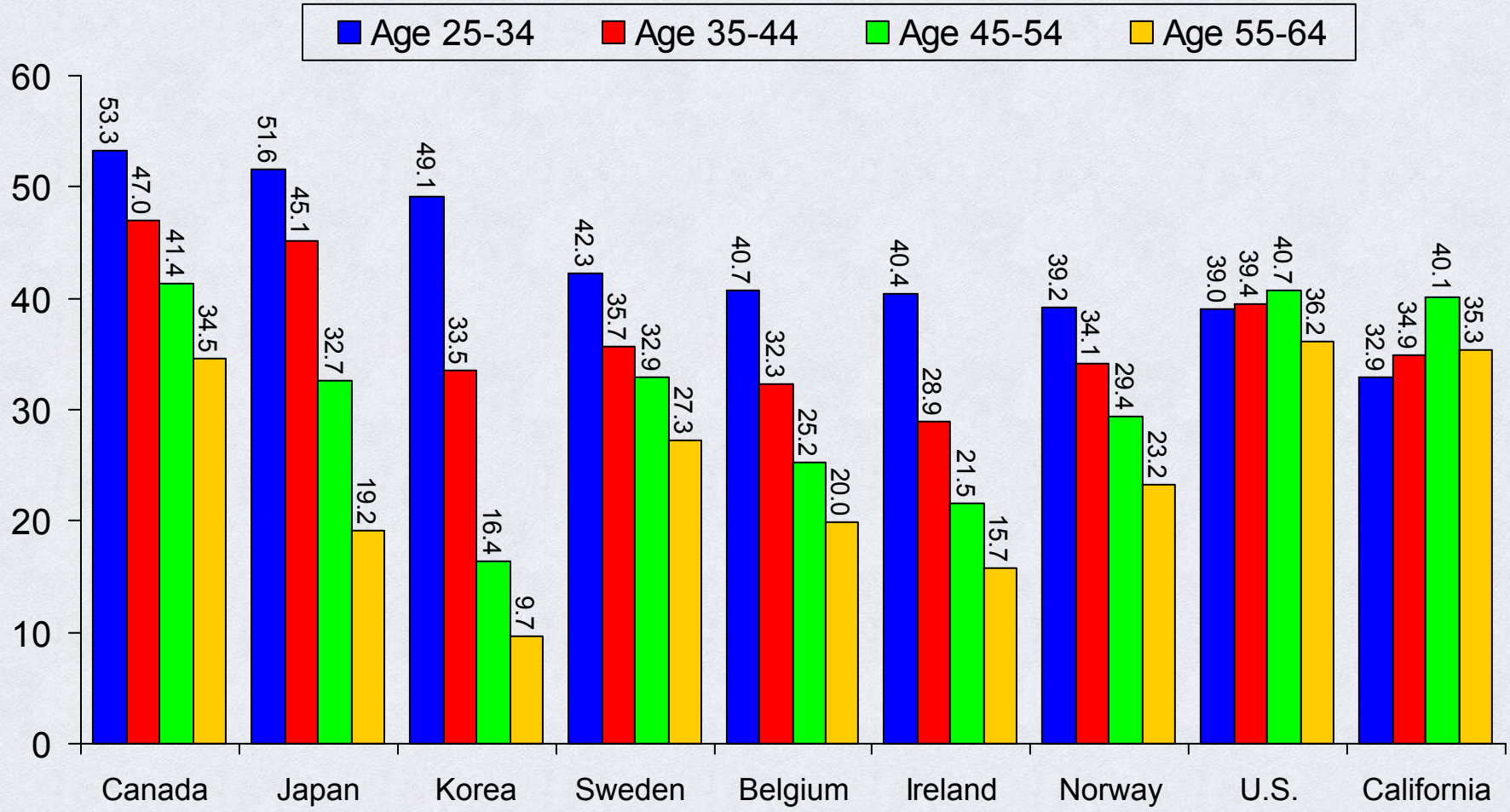
Source: Organisation of Economic Co-operation and Development (OECD)

Differences in College Attainment (Associate and Higher) Between Young and Older Adults—United States, 2000



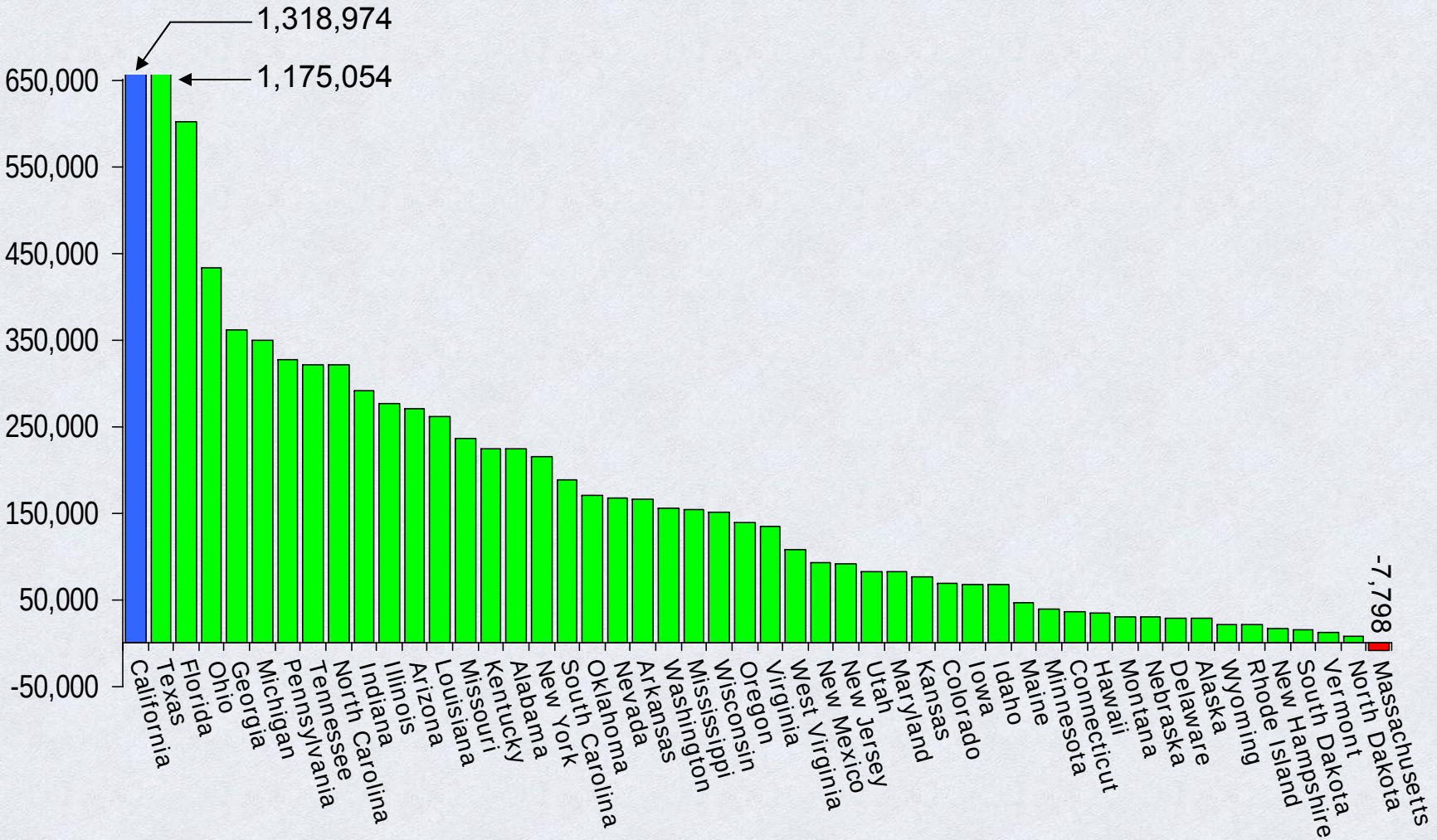
Source: U.S. Census Bureau, 2000 Census

Percent of Adults with an Associate Degree or Higher by Age Group—California, U.S. and Leading OECD Countries, 2004



Source: OECD, *Education at a Glance 2005*

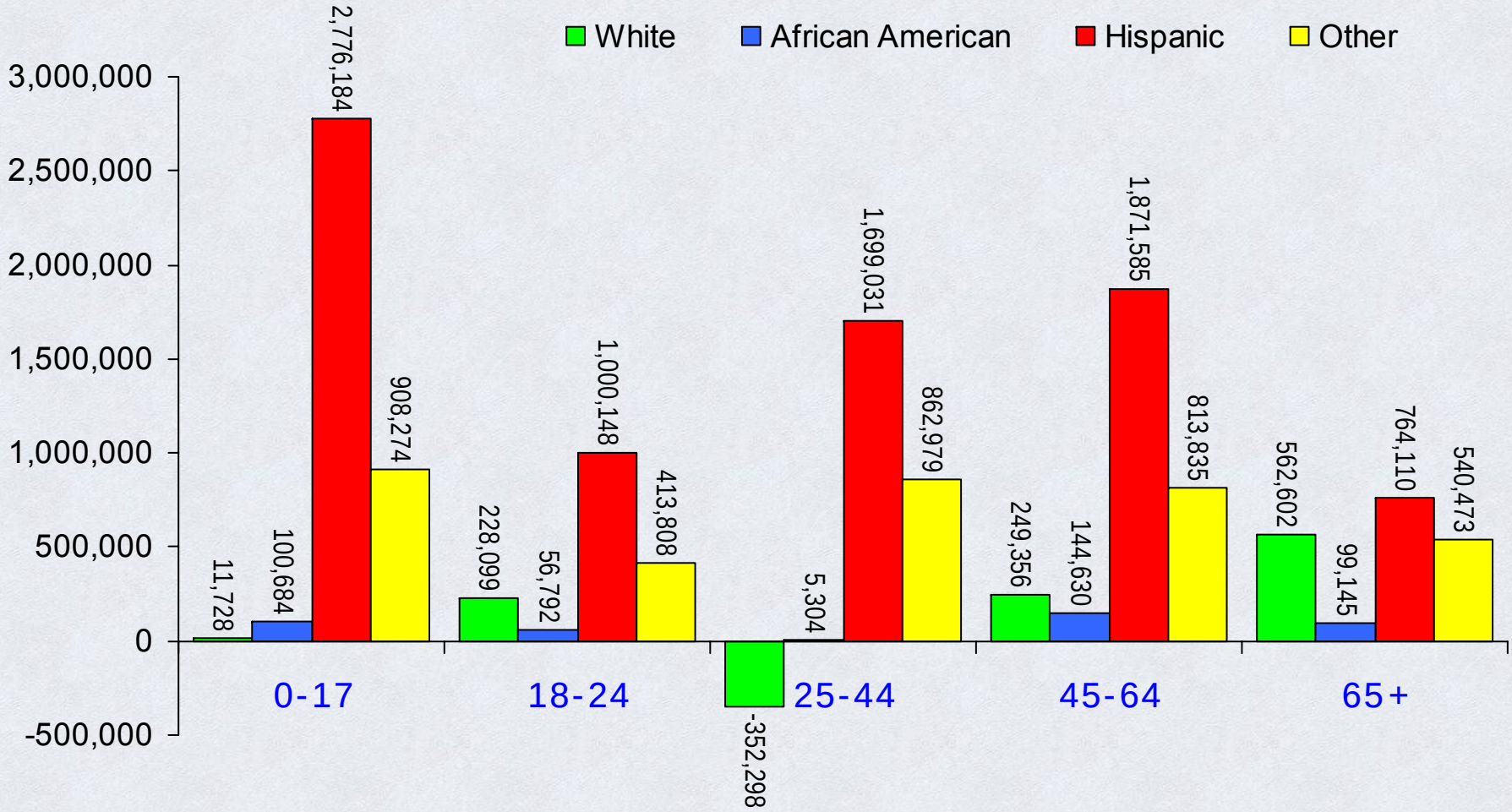
*Additional Degrees (Associate and Above) Needed in Adult Population Age 25-44 to Meet Top Country Performance**



* In Canada, 50.13% of adults age 25-44 have college degrees (Associate and above).

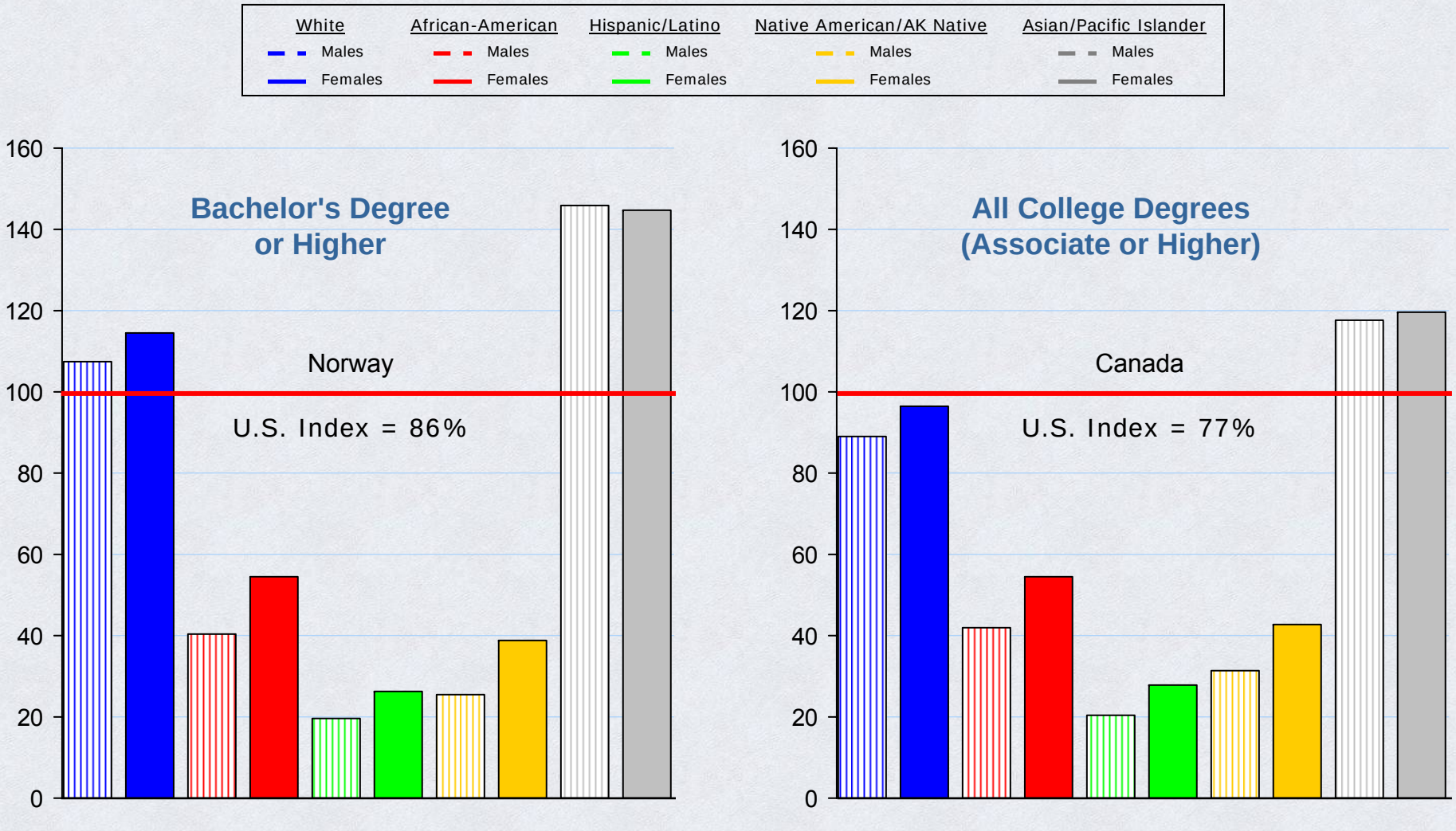
Source: U.S. Census Bureau, 2005 ACS; OECD

Projected Change in California Population by Age and Race/Ethnicity, 2000-20



Source: U.S. Census Bureau

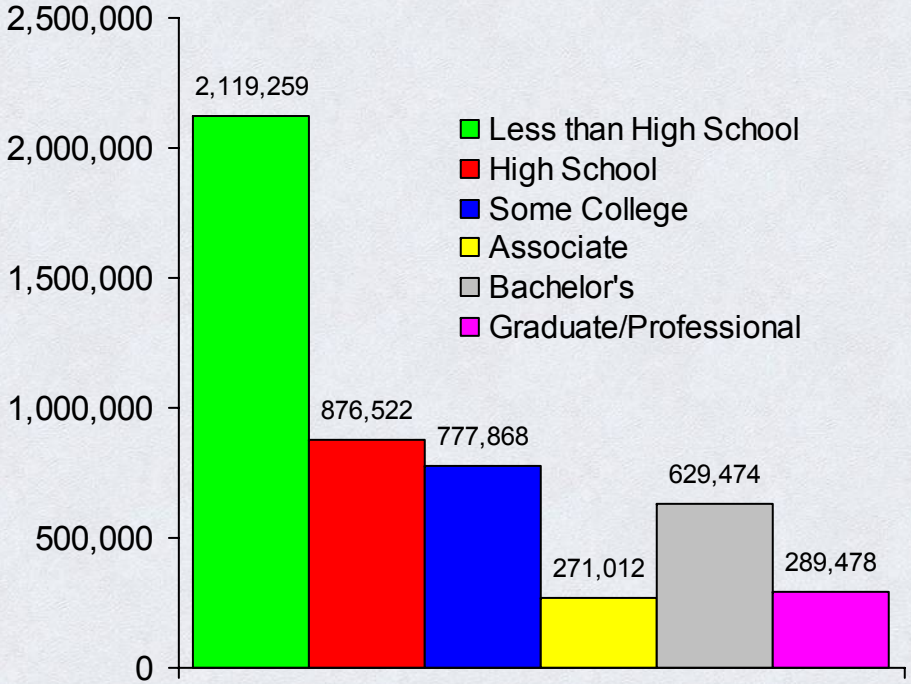
Educational Attainment of Young Workforce (Age 25-34) in California—Indexed to Most Educated Country



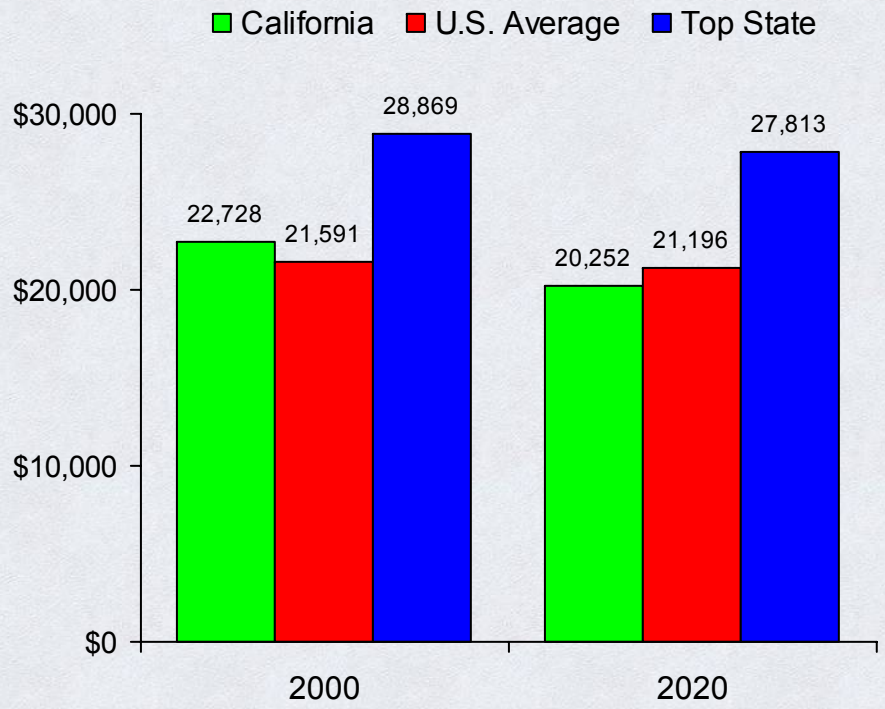
Source: U.S. Census Bureau's Public Use Microdata Samples (based on 2000 Census) and OECD

Impact of Changing Demographics on Educational Attainment and Personal Income, 2000-20

Number Change in Adults Age 25-64 By Degree Level



Change in Per Capita Personal Income (in 2000 $)

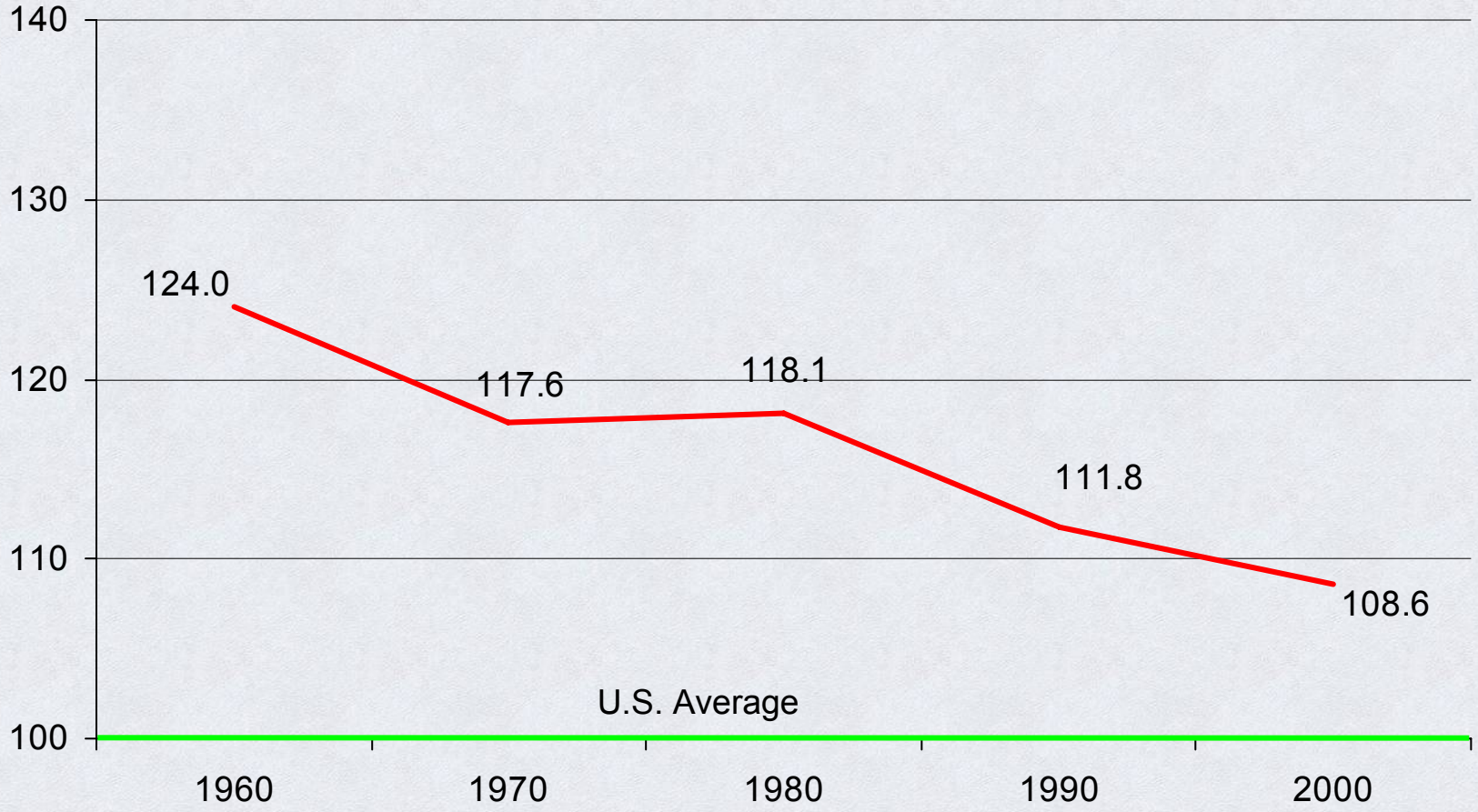


If Hispanics/Latinos, African-Americans, and Native Americans achieved the same levels of education as Whites by 2020, California's personal income would increase by $191.6 Billion (in 2000 $).

Note: Does not account for racial/ethnic disparities in personal earnings for the same levels of education.

Source: U.S. Census Bureau's Population Projections and Census 2000

Per Capita Personal Income as a Percent of U.S. Average—California, 1960-2000

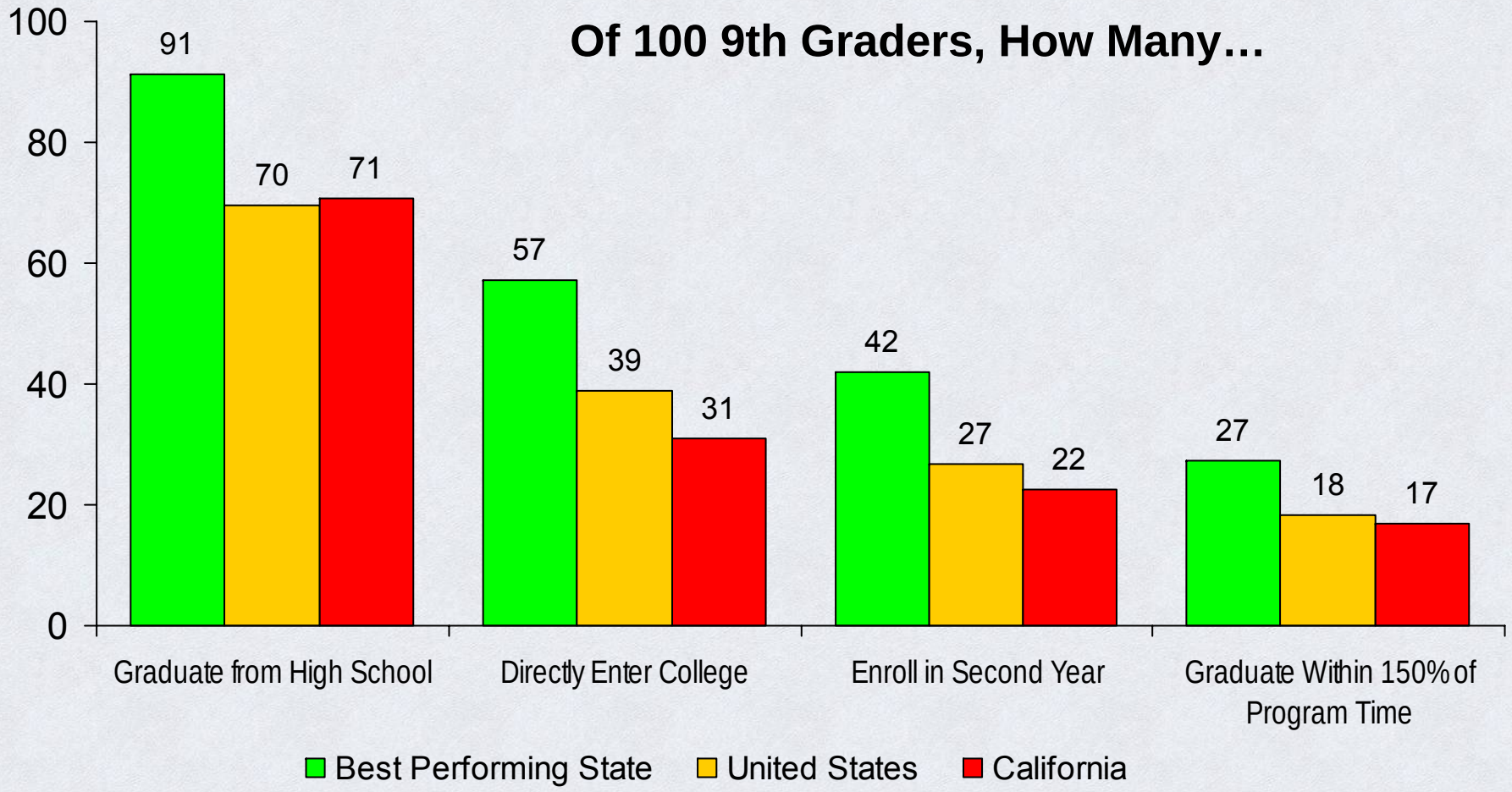


Source: U.S. Census Bureau's Current Population Survey (1960, 1970, 1980, 1990, and 2000)

Key Transition Points in the Education Pipeline

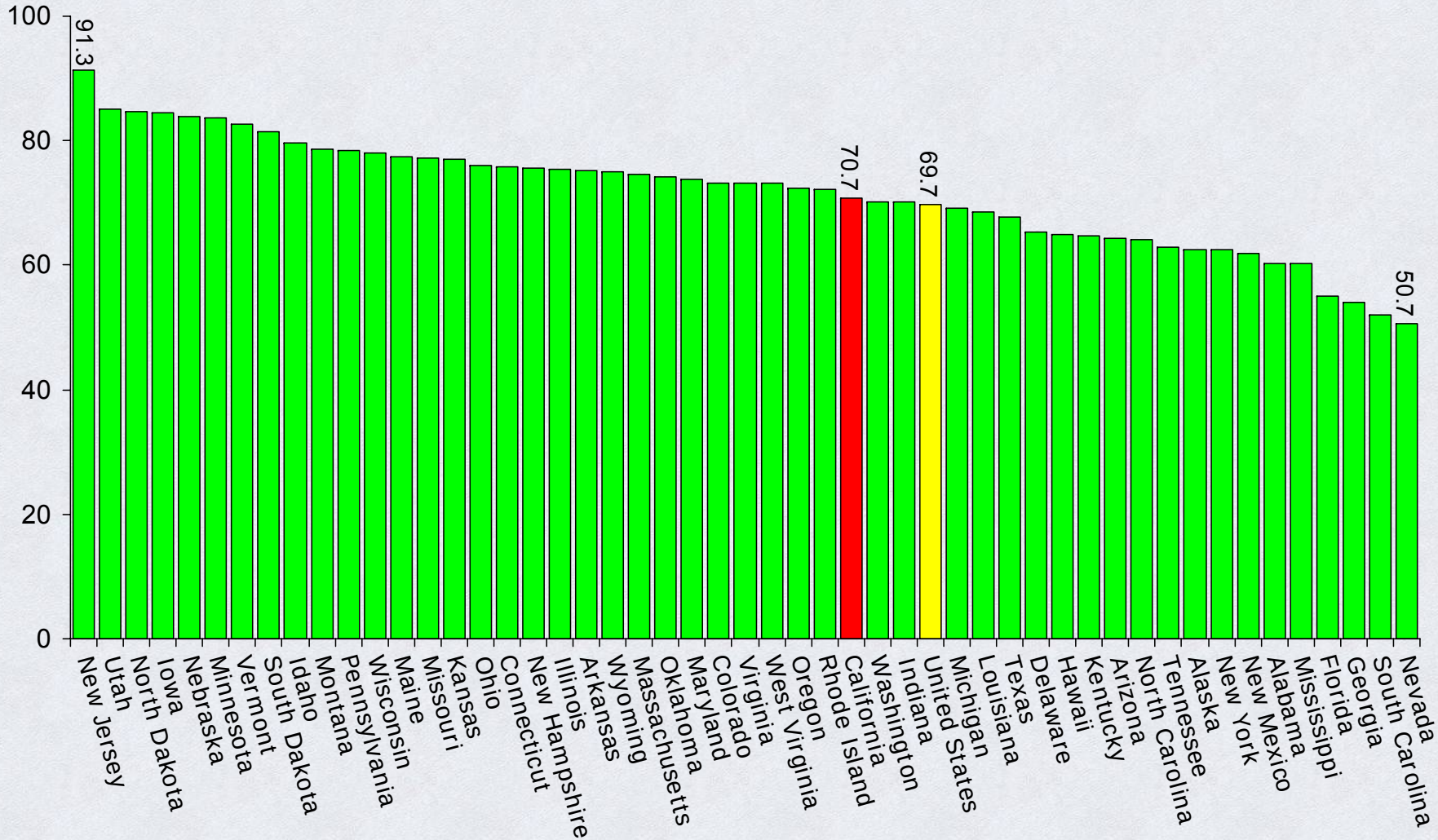
- Complete High School
- Enter College
- Finish College
- Enter the Workplace

Student Pipeline, 2004



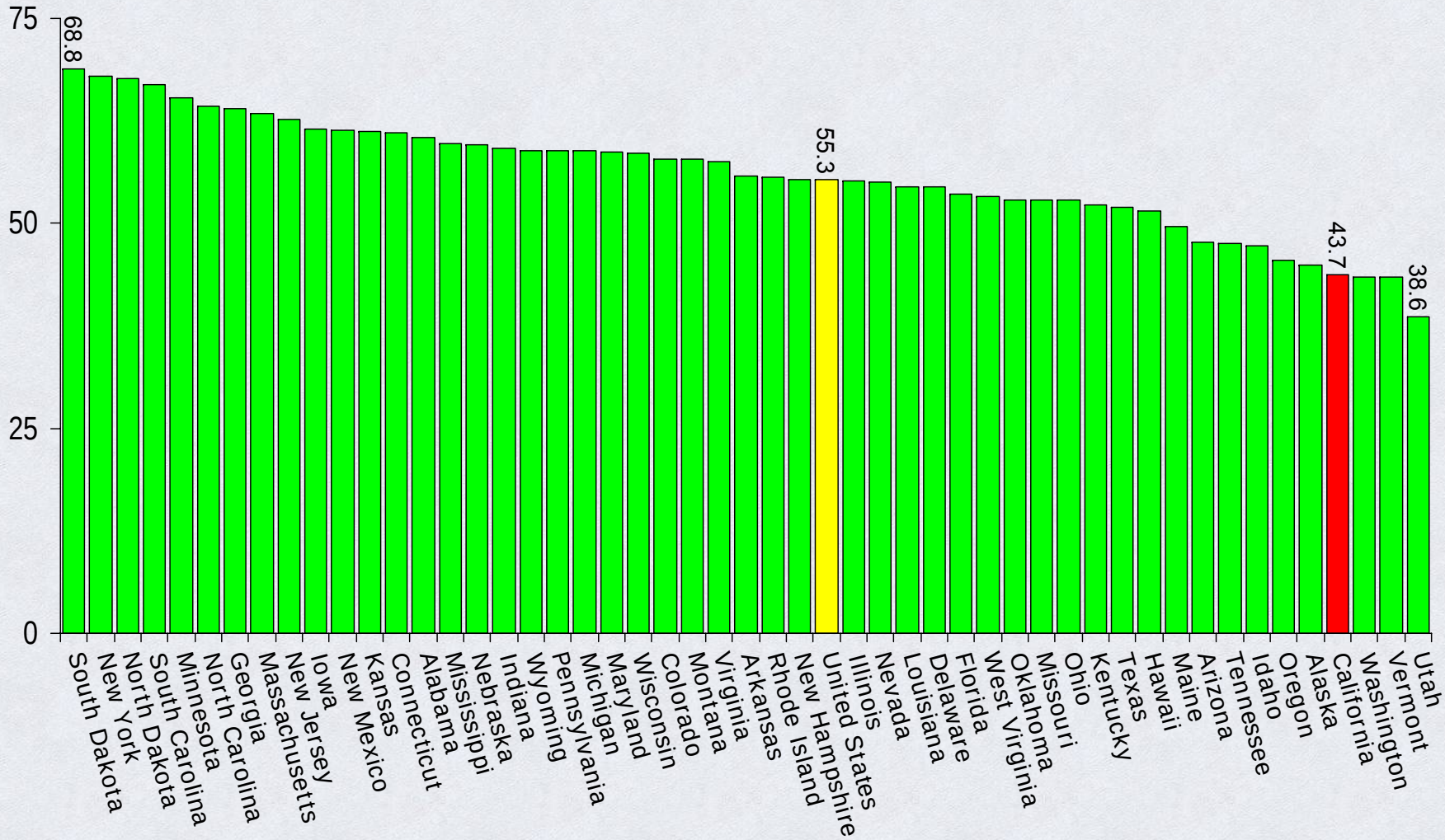
Source: NCES Common Core Data, IPEDS Residency and Migration Survey, IPEDS Enrollment Survey, IPEDS Graduation Rate Survey

High School Graduation Rates—Public High School Graduates as a Percent of 9th Graders Four Years Earlier, 2004



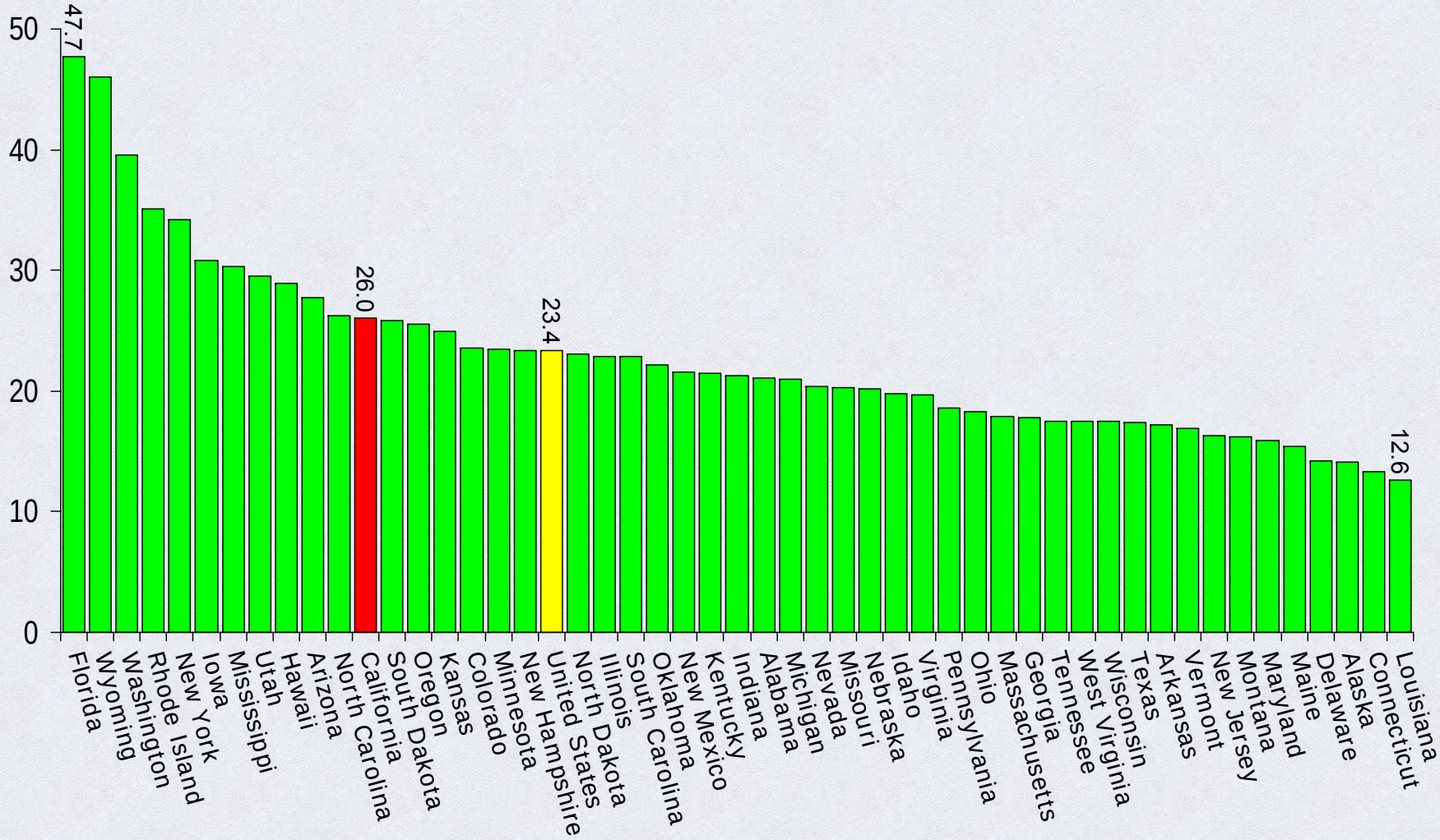
Source: Tom Mortenson, Postsecondary Opportunity (rev. 071106)

College-Going Rates—First-Time Freshmen Directly Out of High School as a Percent of Recent High School Graduates, 2004



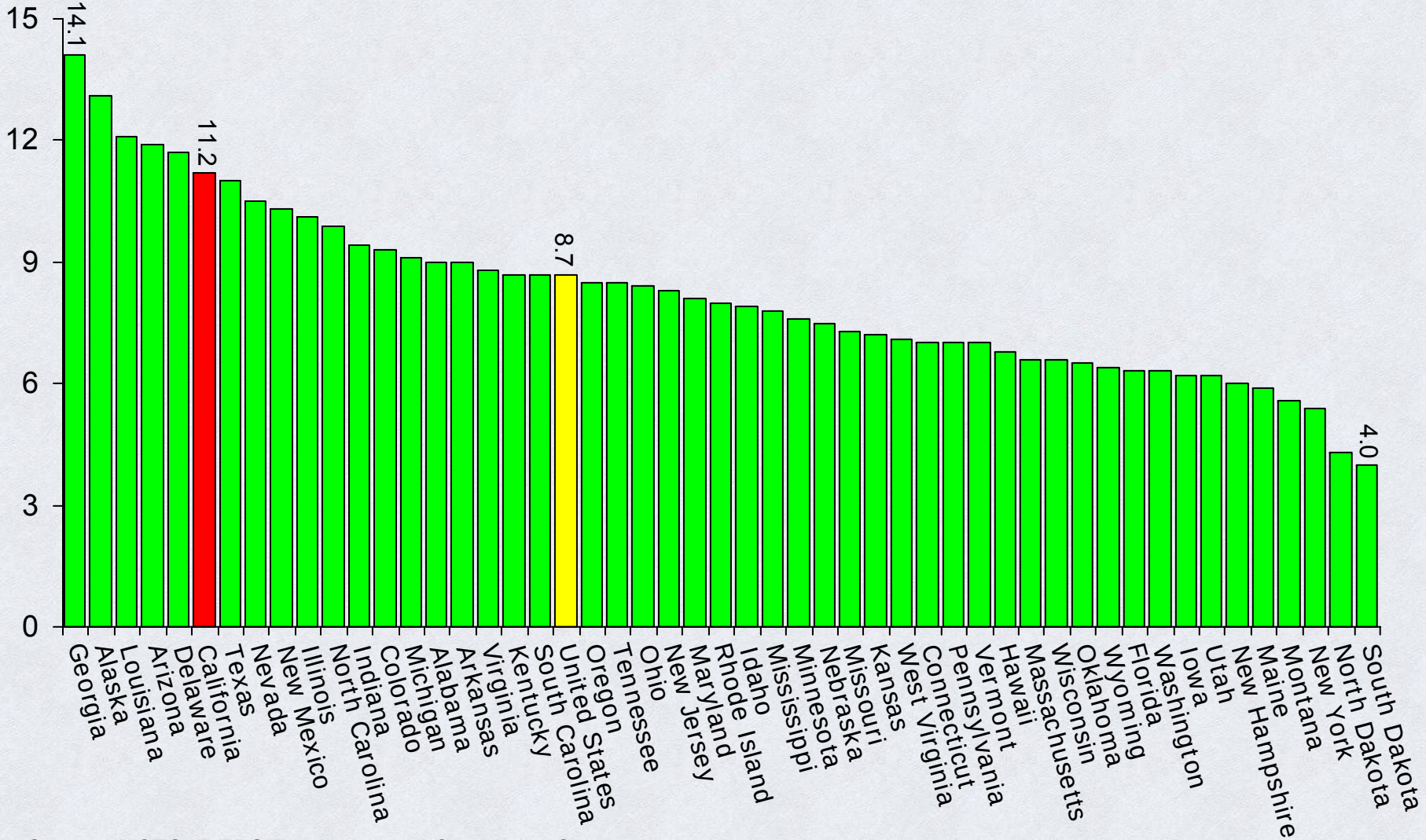
Source: Tom Mortenson, Postsecondary Opportunity

Two-Year and Less Credentials Awarded Per 100 High School Graduates Three Years Earlier, 2004



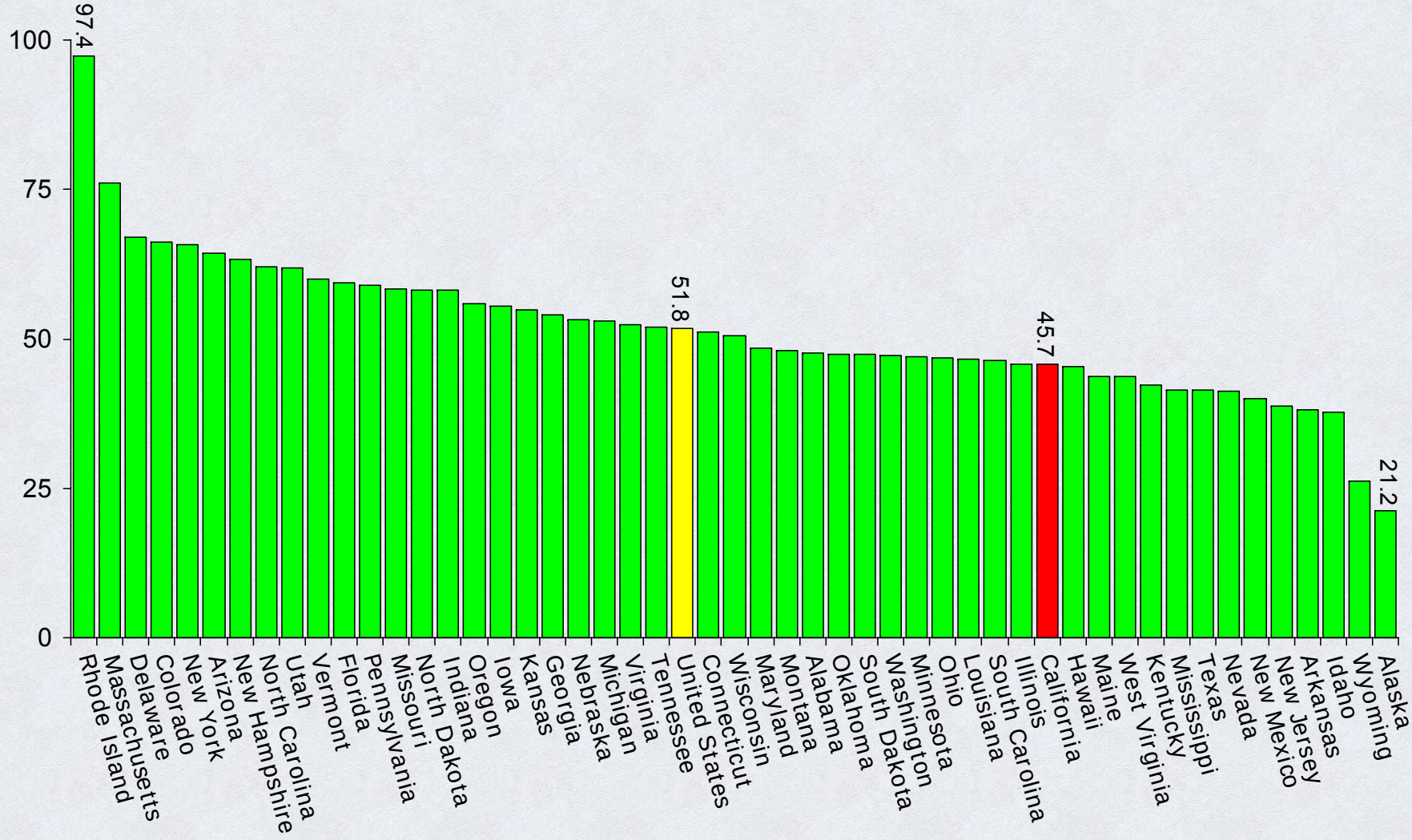
Source: NCES, IPEDS Graduation Rate Survey

Ratio of FTE Enrollment to Associate Degrees at Public Two-Year Colleges, 2004-05



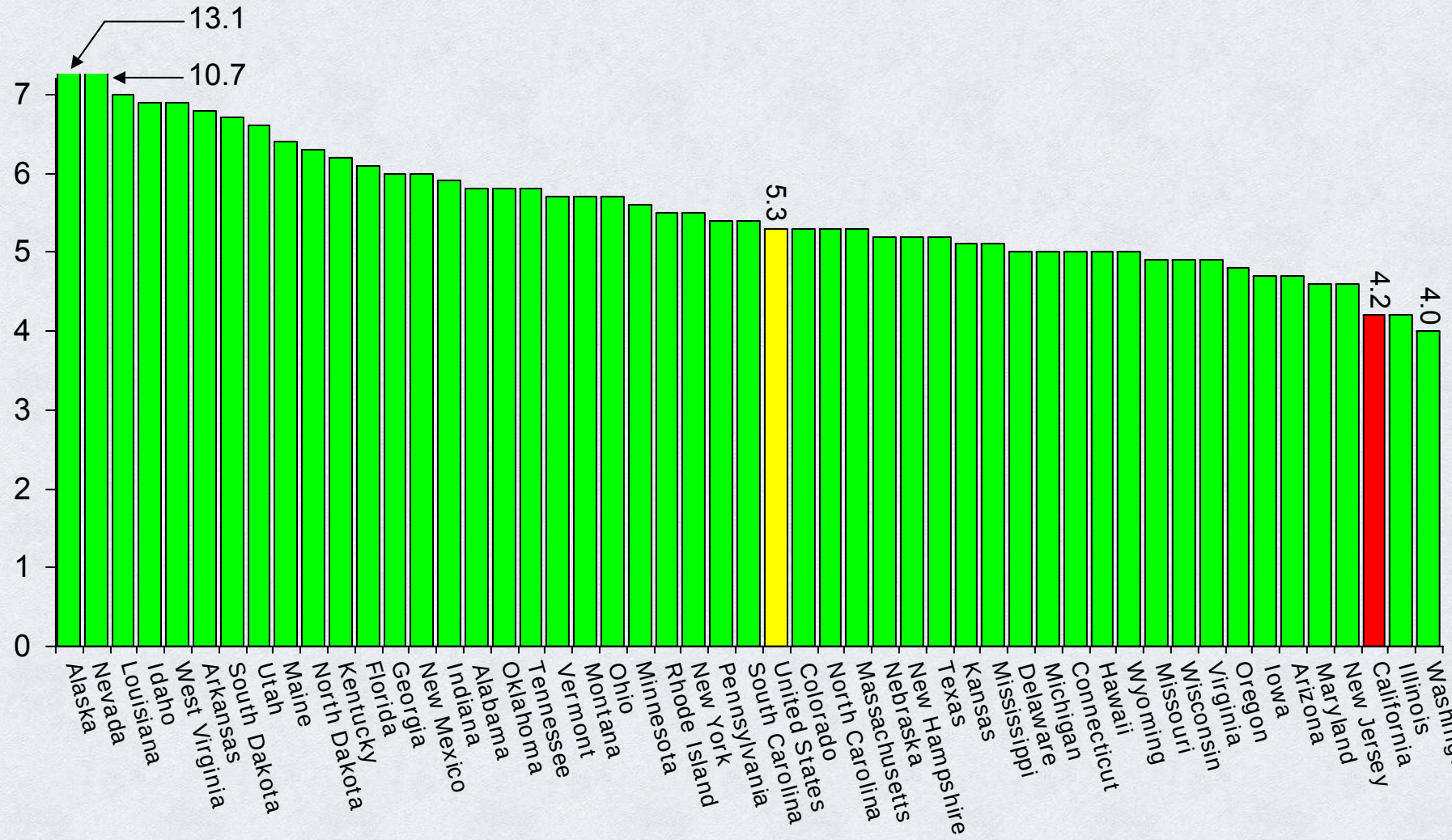
Source: NCES, IPEDS Enrollment and Completion Surveys

Bachelor's Degrees Awarded per 100 High School Graduates Six Years Earlier, 2004



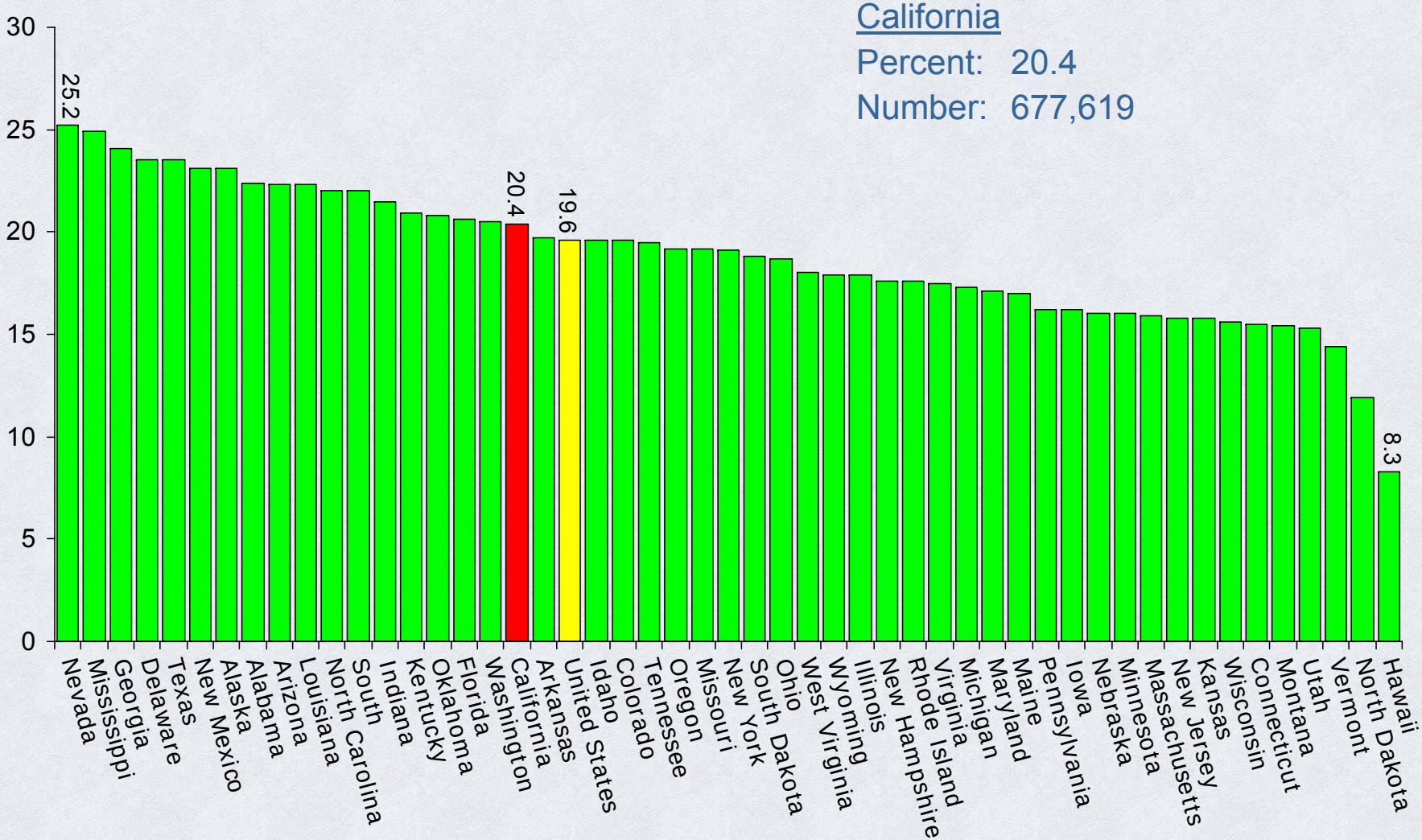
Source: NCES-IPEDS Completions Survey, WICHE

Ratio of FTE Enrollment to Bachelor's Degrees at Public Four-Year Colleges, 2004-05



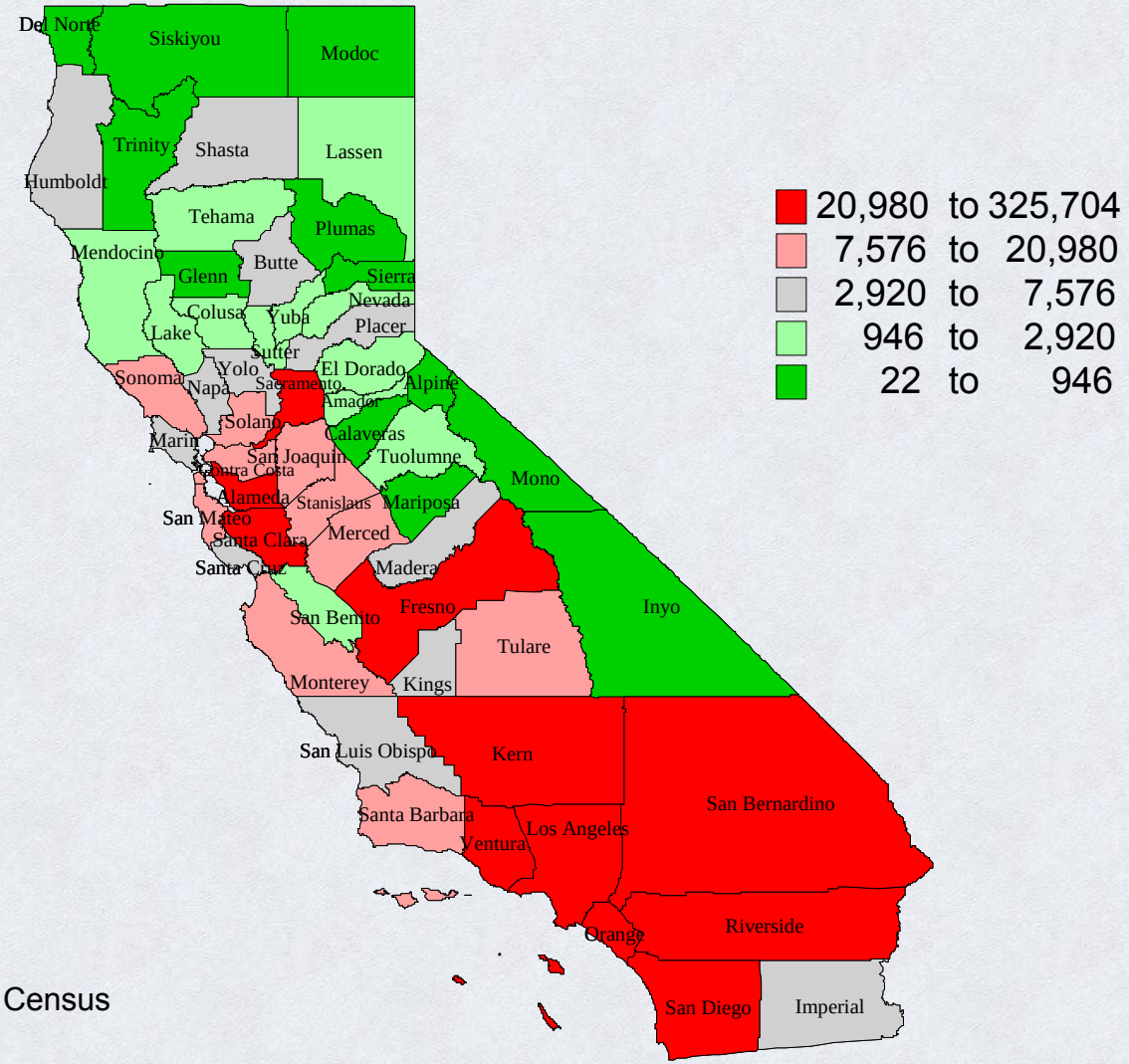
Source: NCES, IPEDS Enrollment and Completion Surveys

Percent of Population Age 18-24 with No High School Diploma, 2005



Source: U.S. Census Bureau, 2005 ACS

Number of Adults Age 18-24 with Less than a High School Diploma, 2000



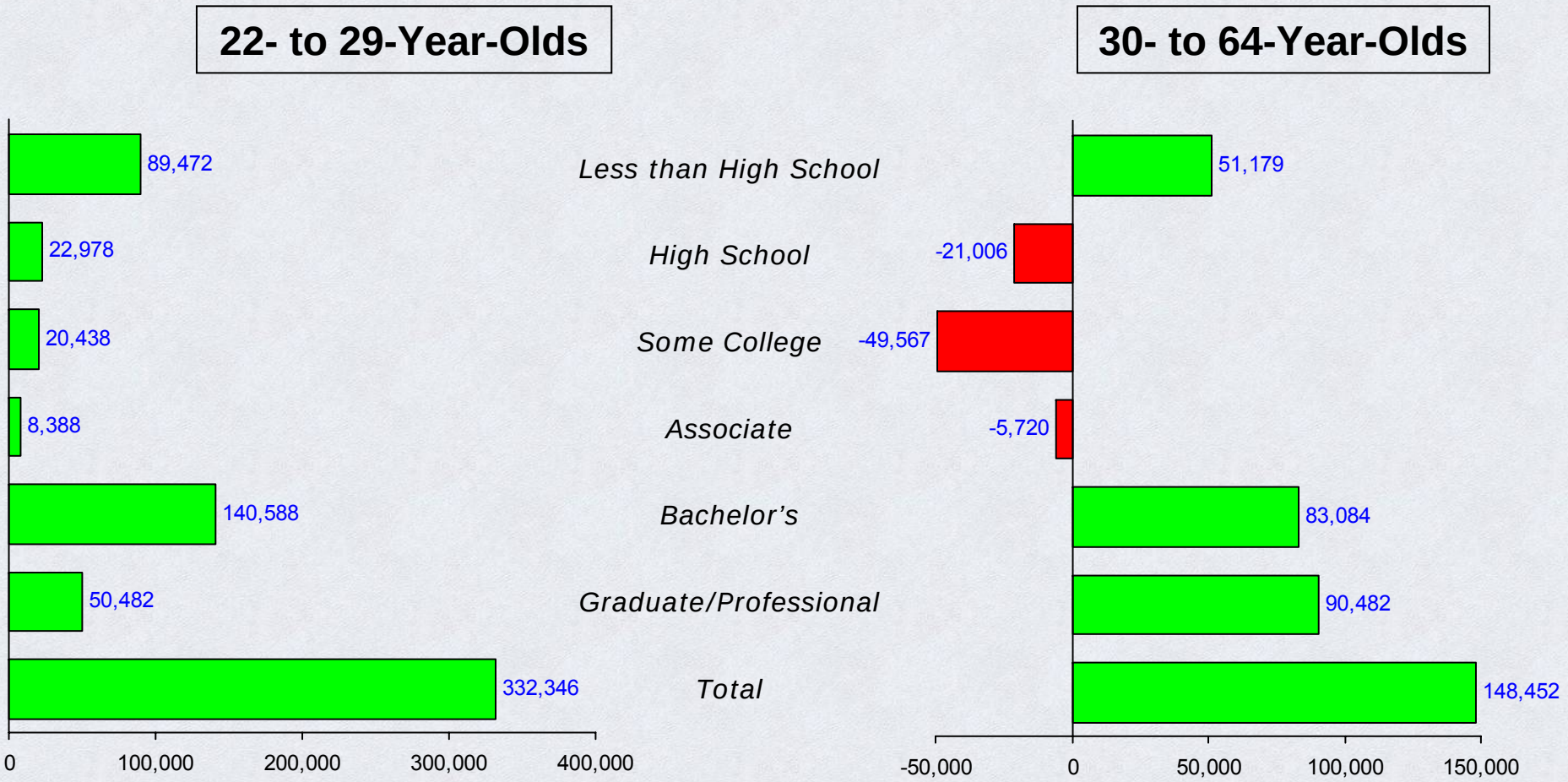
California = 980,602
Source: U.S. Census Bureau, 2000 Census

California Civilians Age 25-64 in the Workforce by Education Attainment, 2000

	In Civilian Workforce		Not in Civilian Workforce	
	Number	***Percent***	***Number***	***Percent***
Less than High School	3,081,771	45.1	3,747,599	54.9
High School Diploma or GED	2,996,876	58.1	2,163,995	41.9
Some College, No Degree	4,055,059	68.2	1,889,093	31.8
Associate Degree	1,191,695	72.7	448,401	27.3
Bachelor's Degree	2,929,966	76.1	919,383	23.9
Graduate or Professional Degree	1,583,659	77.8	452,217	22.2

Source: Integrated Public Use Microdata Series 5% sample, www.ipums.org

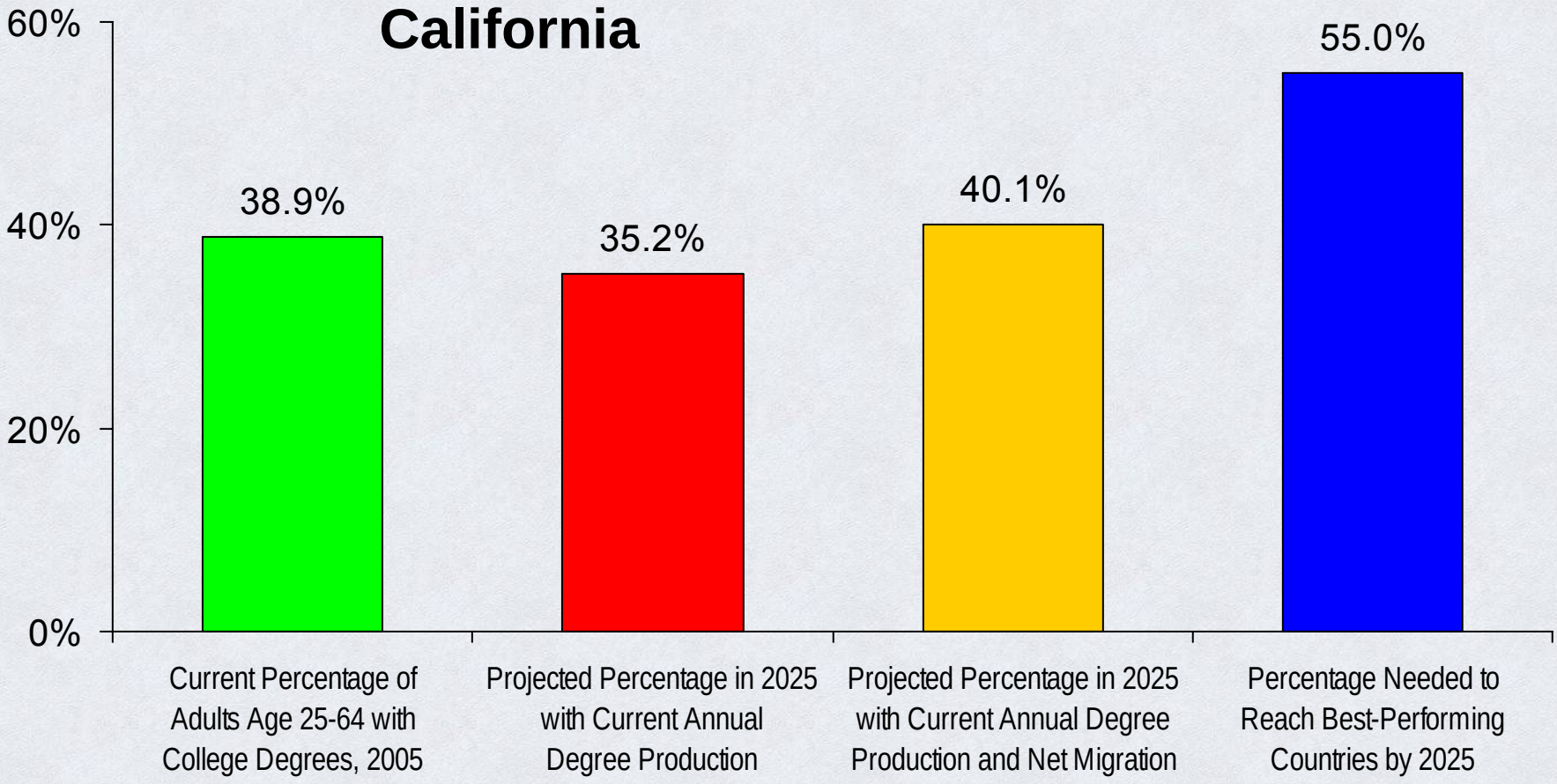
Net Migration by Degree Level and Age Group—California, 1995-2000



Source: U.S. Census Bureau, 2000 Census; 5% Public Use Microdata Sample (PUMS) Files

The Costs of Remaining Competitive

Current Educational Attainment, Educational Attainment in 2025 with Current Degree Production, and Best-Performing Countries in 2025



Reaching Top Performance by 2025 (55%)—California

12,184,792	Number of Individuals to Match Best-Performing Countries (55%)
3,892,099	Number of Individuals (Age 25-44) Who Already Have Degrees
8,292,693	Additional Production Needed (2005-25)
3,897,243	Degrees Produced at Current Annual Rate of Production
4,395,450	Additional Degrees Needed
219,772	Additional Degrees Needed per Year (Currently Produce 194,862)
113%	Increase in Annual Degree Production Needed

Cost to the State of California, Assuming:
Tuition Stays the Same

$ 11.1 Billion = Annual Costs of Additional Students at Current $ per Student

$ 11.5 Billion = Current State Contribution ($8.3 Billion Accounting for Migration)

97% = Percent Increase in Annual State Support Needed

Cost to Students in California, Assuming: No Additional State Investment

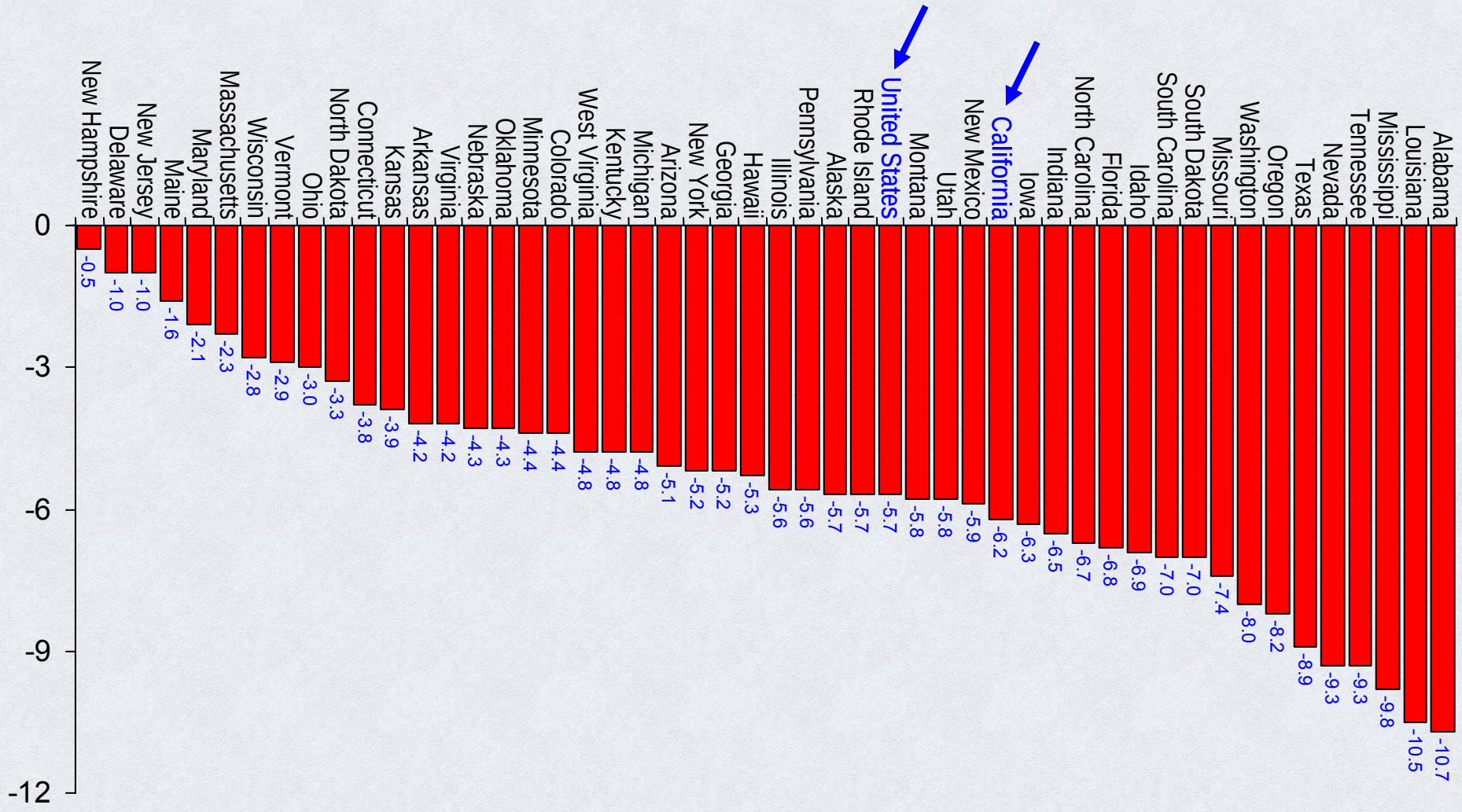
$ 5,207 = Additional Annual Costs to Students at Public Four-Year Institutions

117% Increase in Tuition and Fees
(Currently $4,449)

$ 2,924 = Additional Annual Costs to Students at Public Two-Year Institutions

369% Increase in Tuition and Fees
(Currently $793)

Projected State and Local Budget Surplus (Gap) as a Percent of Revenues, 2013



Source: NCHEMS; Don Boyd (Rockefeller Institute of Government), 2005

Conclusions

- Can't Get the Results Needed with the Resources Available and Maintain Business as Usual
- Improvements in **System** Productivity Must Become a Priority

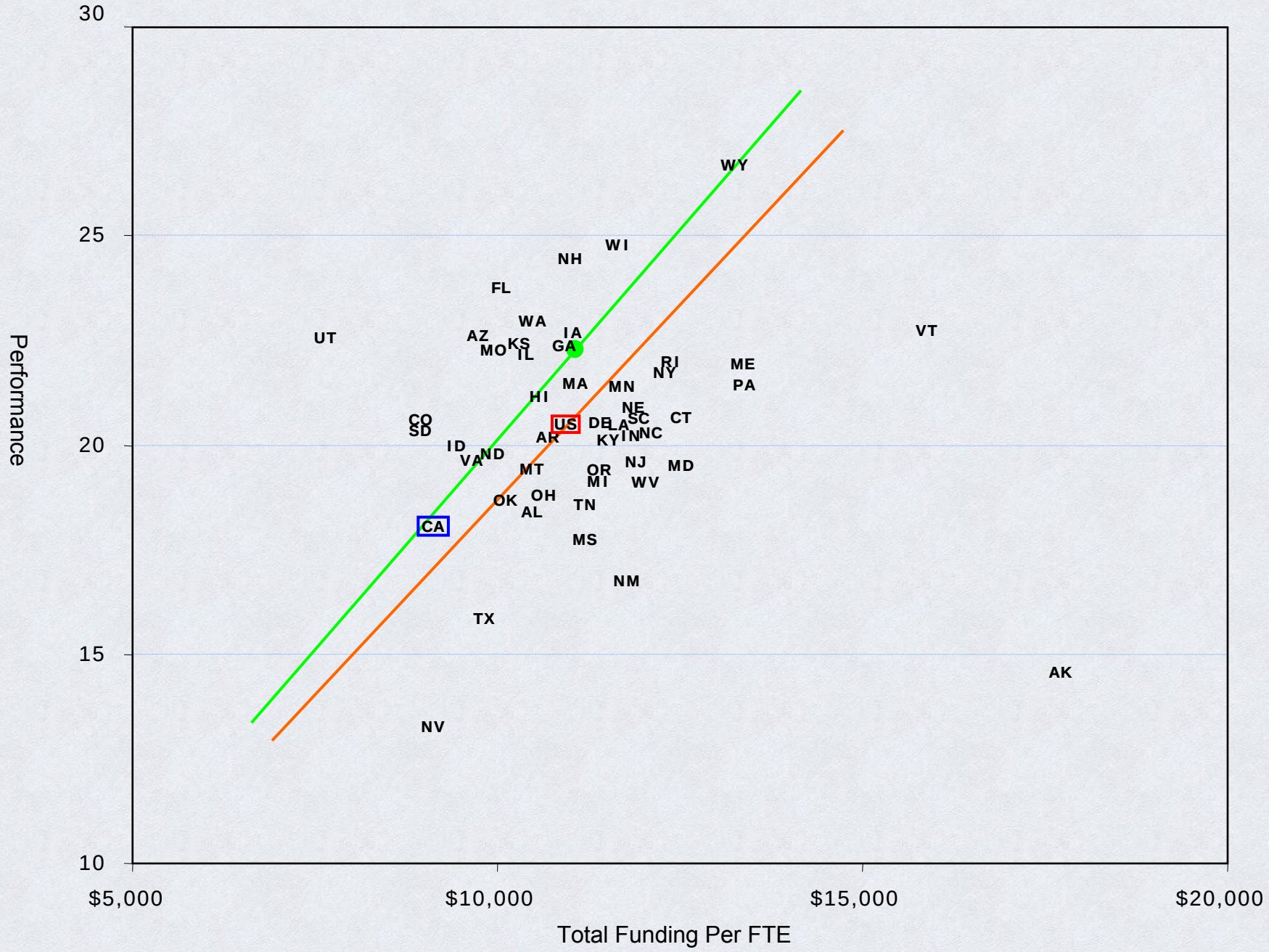
The Evidence that Improvements Are Possible—Comparing Results and Funding

Units of Analyses

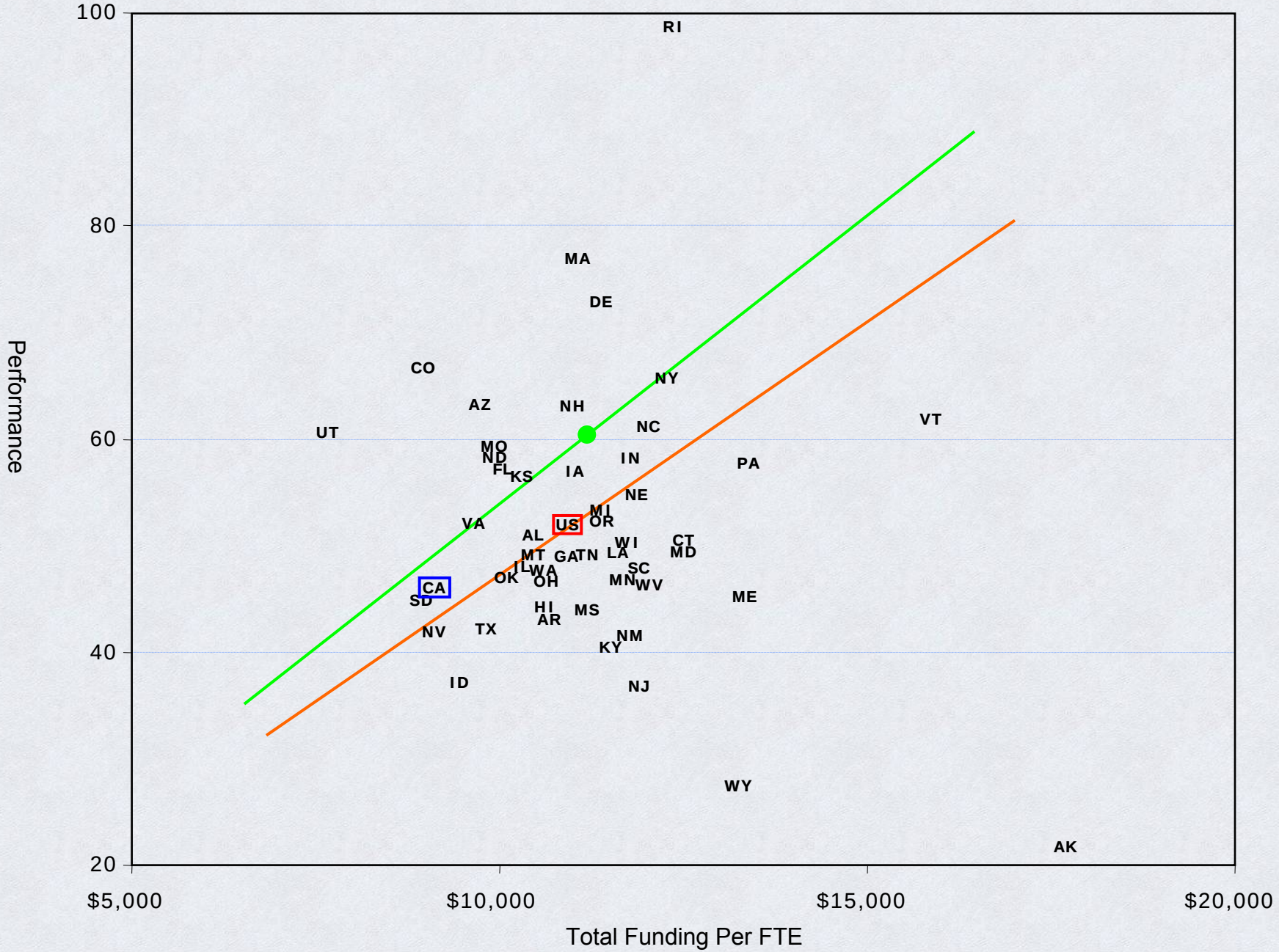
- System (All Institutions, Public and Private)
- Research Universities
- Baccalaureate and Masters Institutions
- Community Colleges

State Systems of Higher Education

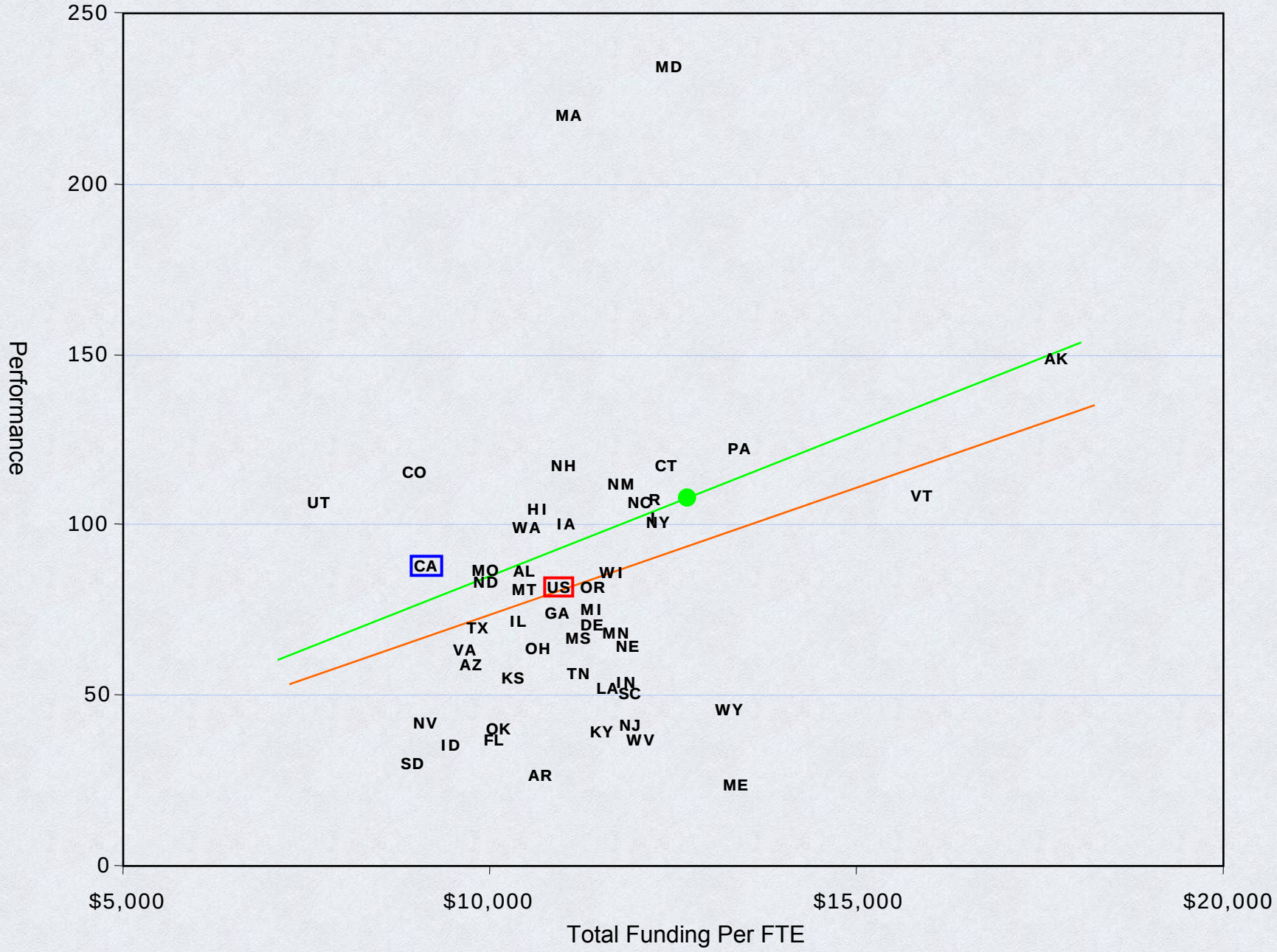
Undergraduate Credentials Awarded per 100 FTE Undergraduates, 2002-03



Bachelor's Degrees as a Percent of High School Graduates Six Years Earlier, 2003

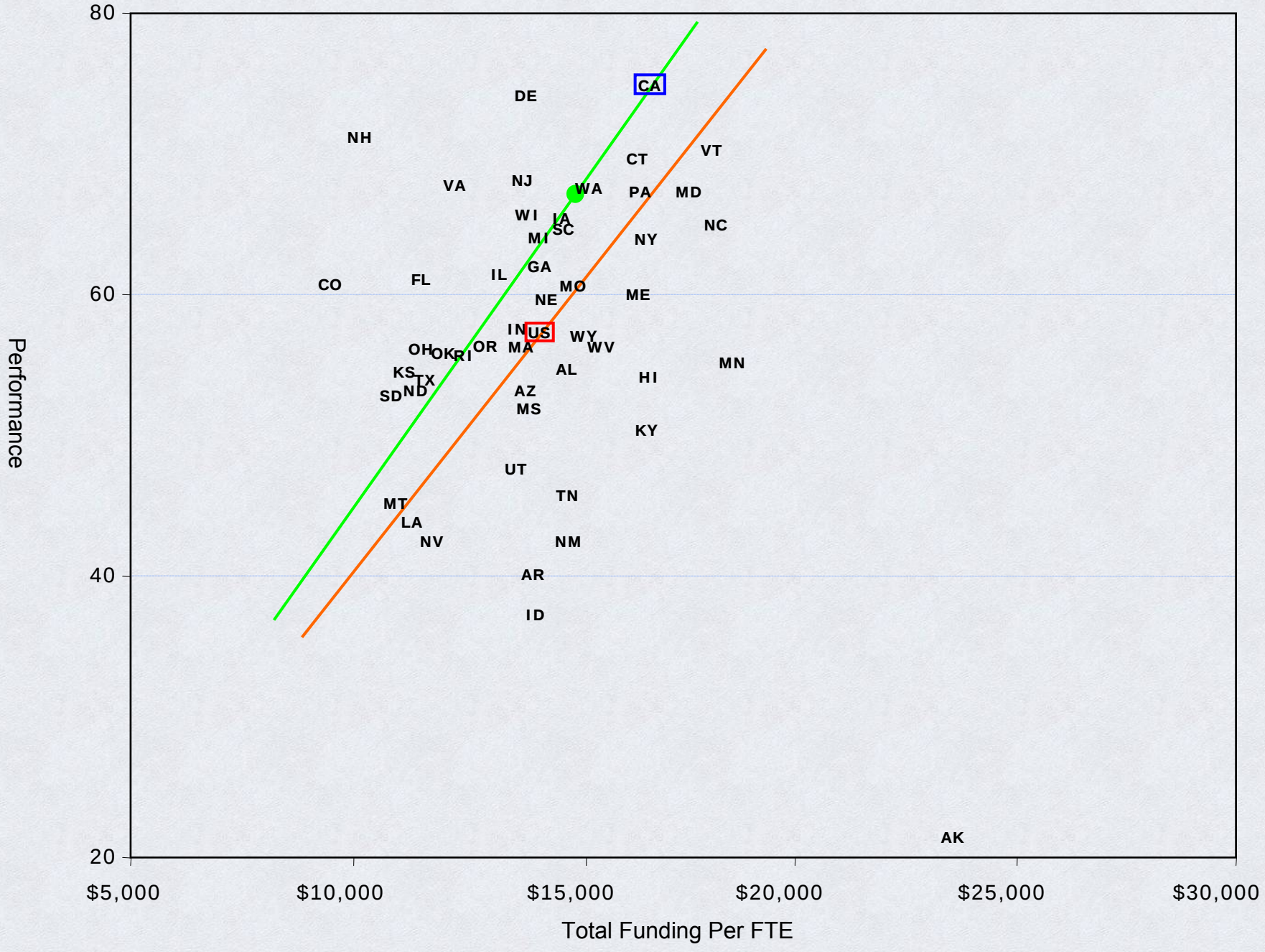


Federal and Industry R&D Per Capita, 2002



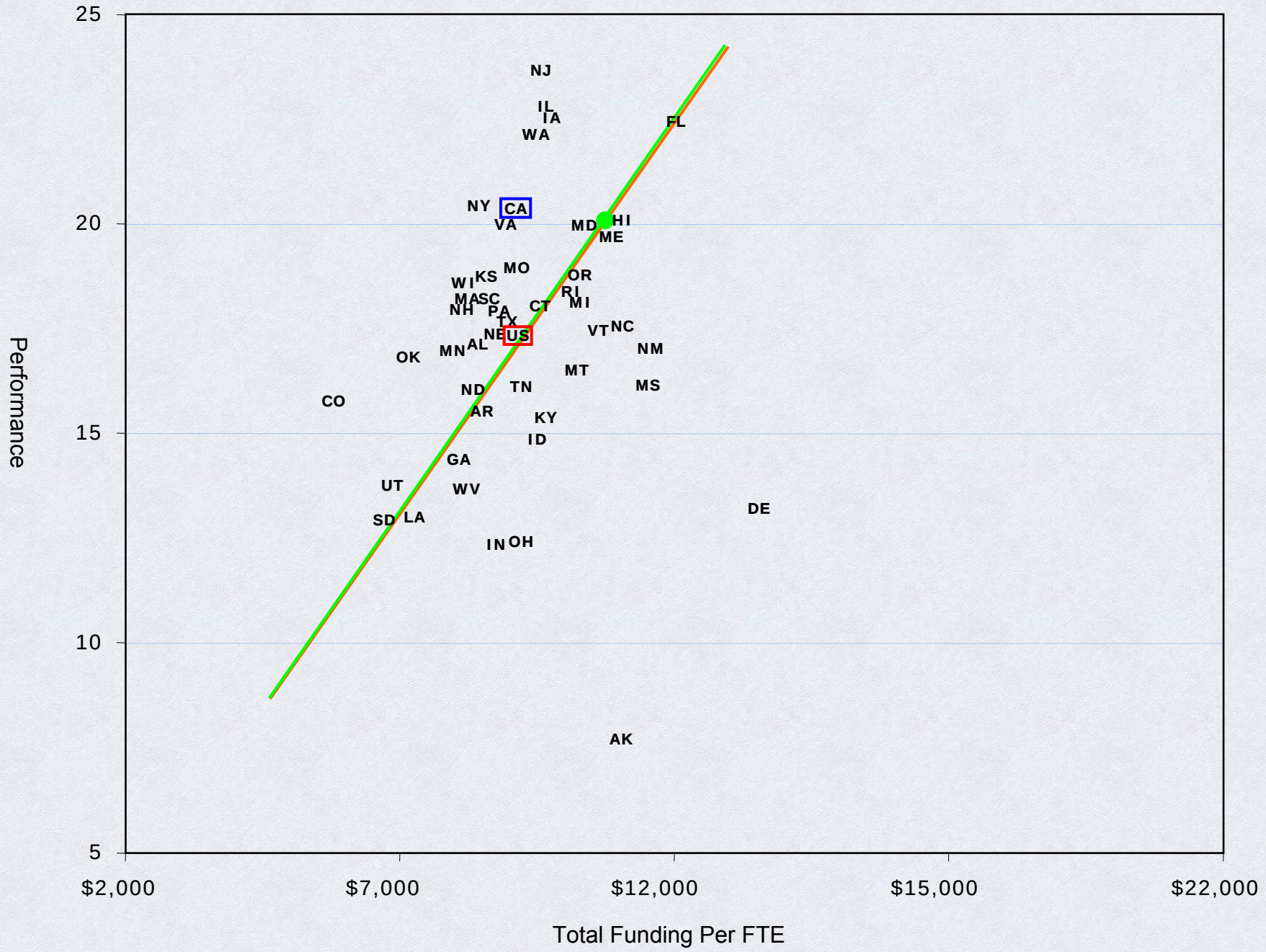
Public Research Institutions

Six-Year Baccalaureate Graduation Rate, 2003



Public Baccalaureate and Master's Institutions

Bachelor's Degrees per 100 FTE Undergraduates, 2002-03



Public Two-Year Institutions

Total Credentials Awarded per 100 FTE Undergraduates, 2003